

Opportunity Title: USDA-APHIS Quantitative Ecology
Opportunity Reference Code: USDA-APHIS-2026-0347

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-APHIS-2026-0347

How to Apply *To submit your application, scroll to the bottom of this opportunity and click **APPLY**.*

A complete application consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Click [here](#) for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations

All documents must be in English or include an official English translation.

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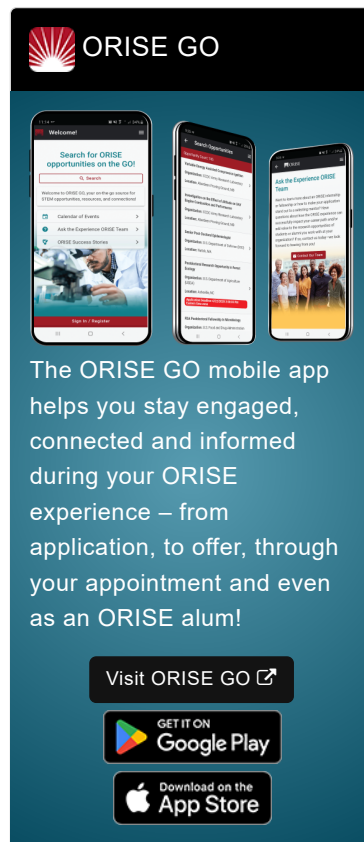
Application Deadline 11/6/2026 3:00:00 PM Eastern Time Zone

Description *Applications are reviewed on a rolling-basis.

APHIS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS), located in Fort Collins, Colorado.

The Animal and Plant Health Inspection Service (APHIS) is a multi-faceted Agency with a broad mission area that includes protecting and promoting U.S. agricultural health, regulating genetically engineered organisms, administering the Animal Welfare Act and carrying out wildlife damage management activities. These efforts support the overall mission of USDA, which is to protect and promote food, agriculture, natural resources and related issues. APHIS' mission also includes addressing issues such as wildlife damage and disease management; regulation of genetically engineered crops and animal welfare; and protection of public health and safety as well as natural resources that are vulnerable to invasive pests and pathogens.

Research Project: Under the guidance of a mentor, you will participate in research activities with two research programs at the National Wildlife Research Center focused on wildlife disease ecology, spatial modeling, and natural resource management. Through this research experience, you will gain exposure to interdisciplinary approaches used to study the spatial distribution, spread, and management of chronic wasting disease (CWD), other wildlife diseases, and feral swine impacts. You will engage with ecological and wildlife management datasets and learn how quantitative



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and statistical tools are applied to address real-world challenges affecting agricultural producers, wildlife populations, and natural resources.

Learning Objectives: As part of this learning experience, you may gain experience in:

- Developing and applying customized Bayesian statistical models for wildlife management and monitoring data.
- Learning how spatial and ecological modeling approaches are used to study wildlife disease spread and management strategies.
- Interpreting wildlife monitoring data while developing an understanding of data collection limitations and challenges commonly encountered in wildlife management research.
- Exploring methods used to evaluate wildlife management practices and their ecological impacts.
- Strengthening quantitative ecology and statistical analysis skills, including Bayesian hierarchical modeling of ecological systems.
- Collaborating with researchers and gaining exposure to communication strategies used to engage diverse stakeholders in natural resource management.
- Learning how scientific modeling can help address management priorities and support practical decision-making in wildlife and natural resource conservation.
- Developing experience communicating research findings through discussions, presentations, reports, or other scientific outreach activities.

Mentors: The mentors for this opportunity are Jennifer Malmberg (Jennifer.Malmberg@usda.gov) and Kimberly Pepin (kim.m.pepin@usda.gov). If you have questions about the nature of the research, please contact the mentors.

Anticipated Appointment Start Date: October 2026. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year but may be renewed upon recommendation of APHIS and is contingent on the availability of funds.

Level of Participation: The appointment is full time.

Citizenship Requirements: This opportunity is available to U.S. citizens only.

ORISE Information: This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and APHIS. Participants do not become employees of USDA, APHIS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

Questions: Please visit our [Program Website](#). After reading, if you have additional questions about the application process, please email USDA-APHIS@orau.org and include the reference code for this opportunity.

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Qualifications The qualified candidate should be currently pursuing or have received a master's or doctoral degree in the one of the relevant fields.

Preferred skills:

- Can communicate technical information clearly both orally and in writing to a variety of audiences.
- Experience with scientific studies and manuscripts through peer-reviewed publication and presented the findings at scientific conferences.
- Manipulates GIS/satellite imagery data describing landcover and spatial meteorological data.
- Models GPS location data of animals to estimate movement behavior.
- Develops statistical models (especially Bayesian hierarchical models) of wildlife disease surveillance data or wildlife populations.
- Experience with analyzing wildlife monitoring or wildlife disease surveillance data.
- Broad, extensive knowledge of wildlife disease ecology and/or invasive species management.
- Develops modeling pipelines from data extraction and processing through all stages of modeling and visualization of results.
- Proficient with programming languages commonly used in quantitative ecology (e.g., C++, python, Matlab, or R), including software for advanced Bayesian data analysis (e.g., NIMBLE, stan).

Stipend \$83,500.00 Yearly

Point of Contact [Michele](#)

- Eligibility**
- **Citizenship:** U.S. Citizen Only
- Requirements**
- **Degree:** Master's Degree or Doctoral Degree.
 - **Discipline(s):**
 - **Computer, Information, and Data Sciences** ([1](#) )
 - **Life Health and Medical Sciences** ([5](#) )
 - **Mathematics and Statistics** ([3](#) )